

### REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 1-8 have been canceled in favor of new claims 9-13. Illustrative, non-limiting, support for the subject matter of the new claims is provided in the original claims, Fig. 3, and the specification on page 1, lines 21-24, page 12, line 12, through page 13, line 13, page 13, line 22, through page 14, line 7, page 19, line 6, through page 20, line 1, and page 22, lines 7-14.

Claims 1-8 were rejected, under 35 USC §103(a), as being unpatentable over Kumar (US 5,748,677) in view of Chen et al. (US 6,101,168). To the extent these rejections may be deemed applicable to new claims 9-13, the Applicant respectfully traverses.

Independent claims 9 and 13 recite grouping a plurality of control data according to classifications indicating the types of control data that can be transmitted simultaneously. After the control data are grouped, the control data of a group is multiplexed and transmitted. These features provide the benefit of reducing the waiting time between transmissions of control data and reducing the number of exchanges required to convey the control data.

By contrast to the above-noted claim features, Kumar discloses multiplying a reference signal by a reference value, summing the result with a data modulated signal, and then transmitting the result. In conjunction with generating the reference value, Kumar discloses a multiplexer that multiplies a value outputted from a T flip-flop by either +1 or -1. In addition, Kumar discloses a compensated accumulator that separates a reference signal and a subcarrier signal from a signal before demodulation on the receiving end.

However, the above-noted features of Kumar bear no relationship to the present invention. Kumar does not disclose determining to which group control data belongs and multiplexing and transmitting a plurality of control data that belong to the same group.

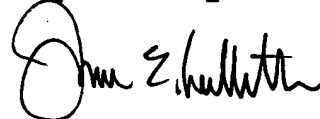
Chen discloses a multiplexer that multiplexes pilot data and control data, a symbol accumulator that accumulates data multiplied by pilot Walsh codes, and ACK and NACK messages for retransmission control. But Chen bears no relationship to the present invention. That is, Chen does not disclose determining to which group control data belongs and multiplexing and transmitting a plurality of control data that belong to the same group.

In accordance with the above discussion, Applicant submits that the applied references do not suggest the subject matter defined by independent claims 9 and 13 of: (1) grouping a plurality of control data according to classifications indicating the types of control data that can be transmitted simultaneously and (2) multiplexing the control data of a group and transmitting the multiplexed control data. Therefore, allowance of claims 9 and 13 and all claims dependent therefrom is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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